


U.S. DEPARTMENT OF ENERGY  
NOTICE OF FINANCIAL ASSISTANCE AWARD

Under the authority of Public Law Department of Energy Organization Act of 1977, as amended, Public Law 95-91, 42 U.S.C. 7101 et. seq., 31 U.S.C. 6301-6308

1. PROJECT TITLE Eddy Lea Siting Study for the GNEP CFTC and ABR Facilities		2. INSTRUMENT TYPE <input checked="" type="checkbox"/> Grant <input type="checkbox"/> Cooperative Agreement	
3. RECIPIENT (Name, address, zip code) Eddy Lea Energy Alliance 320 North Turner Hobbs, NM 88240-8302		4. INSTRUMENT NO. DE-FG07-07ID14799	5. AMENDMENT NO. A000
6. BUDGET PERIOD FROM: 1/30/2007 THRU: 5/1/2007		7. PROJECT PERIOD FROM: 1/30/2007 THRU: 5/1/2007	
8. RECIPIENT PROJECT DIRECTOR (Name, phone and Email) Mark Turnbough 505-393-3085 turnboughmark@sbcglobal.net		10. TYPE OF AWARD <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Renewal <input type="checkbox"/> Revision <input type="checkbox"/> Incremental Funding	
9. RECIPIENT BUSINESS OFFICER (Name, phone and Email) Harry Teague 505-393-9898 harry.teague@teacoenergy.com			
11. DOE PROJECT OFFICER (Name, address, phone and Email) Deborah A. Swichkow 301-903-1633 U.S. DEPARTMENT OF ENERGY deborah.swichkow@nuclear.energy.gov NE-1/Germantown 1000 Independence Ave. S.W., MS NE-1 Washington, DC 20585-1290		12. ADMINISTERED FOR DOE BY (Name, address, phone and Email) Elizabeth E. Dahl 208-526-7214 U.S. DEPARTMENT OF ENERGY dahlee@id.doe.gov IDAHO OPERATIONS OFFICE 1955 FREMONT AVENUE, MS 1221 IDAHO FALLS, ID 83415	
13. RECIPIENT TYPE <input type="checkbox"/> State Gov't <input type="checkbox"/> Indian Tribal Gov't <input type="checkbox"/> Hospital <input checked="" type="checkbox"/> For Profit Organization <input type="checkbox"/> Individual <input type="checkbox"/> Local Gov't <input type="checkbox"/> Institution of Higher Education <input type="checkbox"/> Other Nonprofit Organization <input type="checkbox"/> C <input type="checkbox"/> P <input type="checkbox"/> SP <input type="checkbox"/> Other (Specify)			
14. ACCOUNTING AND APPROPRIATION DATA: 2007/2006/02 /02814 /2823611 /ID /500201 /NA /NA /41000 /ID14799/NA /XID=40363			15. EMPLOYER ID: TIN 85-6000226 DUNS 784353208
16. BUDGET AND FUNDING INFORMATION			
a. CURRENT BUDGET PERIOD INFORMATION		b. CUMULATIVE DOE OBLIGATIONS	
(1) DOE Funds Obligated This Action \$1,590,016.00		(1) This Budget Period \$1,590,016.00	
(2) DOE Funds Authorized for Carry Over \$0.00		[Total of lines a.(1) and a.(3)]	
(3) DOE Funds Previously Obligated in this Budget Period \$0.00		(2) Prior Budget Periods \$0.00	
(4) DOE Share of Total Approved Budget \$1,590,016.00		(3) Project Period to Date \$1,590,016.00	
(5) Recipient Share of Total Approved Budget \$0.00		[Total of lines b.(1) and b.(2)]	
(6) Total Approved Budget \$1,590,016.00			
17. TOTAL ESTIMATED COST OF PROJECT, INCLUDING DOE FUNDS TO FFRDC \$1,590,016.00 (This is the current estimated cost of the project. It is not a promise to award nor an authorization to expend funds in this amount.)			
18. AWARD/AGREEMENT TERMS AND CONDITIONS This award/agreement consists of this form plus the following: a. Special terms and conditions b. Applicable program regulations (Specify) (Date) _____ c. DOE Financial Assistance Regulations, 10 CFR Part 600 at <a href="http://ecfr.gpoaccess.gov">http://ecfr.gpoaccess.gov</a> or, if the award is a grant to a Federal Demonstrations Partnership (FDP) institution, the FDP Terms & Conditions and the DOE FDP agency Specific Requirements at <a href="http://www.nsf.gov/awards/managing/fed_dem_part.jsp">http://www.nsf.gov/awards/managing/fed_dem_part.jsp</a> d. Application/proposal as approved by DOE. e. National Policy Assurances to Be Incorporated as Award Terms at <a href="http://grants.pr.doe.gov">http://grants.pr.doe.gov</a>			
19. REMARKS FFRDC Funding \$0.00 (Any FFRDC Funding will be provided directly to the lab and will not be available to Awardee.) SEE ATTACHED CONTINUATION SHEET(S)			
20. EVIDENCE OF RECIPIENT ACCEPTANCE  _____ (Signature of Authorized Recipient Official)  _____ (Name)  _____ (Title)		21. AWARDED BY   (Signature)  Elizabeth E. Dahl (Name)  Contracting Officer (Title)	

NFAA BLOCK 19. REMARKS: *(Continued)*

Award consists of the following:

**Funding** (see attached Budget Information sheet for revised data)

This amendment obligates \$1,590,016.00 for Budget Period 1.

Budget Period 1: Jan 30, 2007 thru May 01, 2007.

**Directly Incorporated**

**Part I:**

DOE Form 4600.1, Notice of Financial Assistance Award (NFAA), with Continuation Sheets

**Part II:**

DOE Federal Assistance Budget Information

**Part III:**

Statement of Objectives below: The original proposal submitted September 6, 2006, as modified by cost proposal negotiations ending January 17, 2007, is incorporated to support the Statement of Objectives below.

**Part IV:**

DOE Form 4600.2, Federal Assistance Reporting Checklist, with Report Distribution List

**Part V:**

Special Terms and Conditions

The special terms and conditions are appended by other remarks listed at the end of the NFAA pages.

**Other Remarks**

**Pre-Award Costs GNEP Site Studies**

You are entitled to reimbursement for costs incurred on or after December 12, 2006, as authorized by the pre-award costs letter dated December 11, 2006, if such costs are allowable in accordance with the applicable Federal cost principles referenced in 10 CFR part 600.

**Statement of Objectives**

The objective of this award is to perform a detailed siting study resulting in a Detailed Site Report that provides the information for hosting the Consolidated Fuel Treatment Center (CFTC) and the Advanced Burner Reactor (ABR) facilities at the location specified in the submitted application. In addition, up to three informal community-involvement activities will be performed as part of this award to inform the state and local stakeholders of the purpose of the GNEP siting studies and obtain their opinions.

Information to support the Detailed Site Report must represent the best and most current information, be readily available in existing literature, and be available, or capable of being made available, for public review. The report must contain a completed Site Selection Reference Data Form for all data used to meet the deliverable requirements and be provided with the Detailed Site Report. The Detailed Site Report will be available to the public. Therefore, it shall not contain any proprietary data or other information not subject to public release.

The Detailed Site Report is to include identification of the site and the specific location within that site for the Consolidated Fuel Treatment Center (CFTC) and the Advanced Burner Reactor (ABR) facilities. The report must include the information as described below:

## 1. Maps

- a. Site location: State, county, latitude and longitude Universal Transverse Mercator (UTM) coordinates, township, range, and sections.
- b. A map of the site showing site boundaries area and linear dimensions; exclusion area; existing site structures and facilities; major land uses (with land use classifications consistent with the U.S. Geological Survey (USGS) categories);
- c. The proposed construction zone for one or more facilities; current zoning classification; sites for any planned buildings and structures (both temporary and permanent); and transportation routes adjacent to the site (including improved roads).
- d. A map of the site vicinity within about a 10-km (6-mi) radius of one or more facilities showing county and local municipality boundaries; place names; residential areas; schools; airports; industrial and commercial facilities; prisons; roads; railroads; major land uses (with land classification consistent with the USGS categories); current zoning classification; utility rights-of-way; rivers; flood plains, other bodies of water; wetlands; trust lands; historic sites; archaeological sites; Native American lands; military reservations; and designated Federal, State, and local parks and natural area. Orient true north at the top of the map.
- e. A map of the region within an 80-km (50-mi) radius of the site showing major civil divisions; highways; transmission corridors that would serve the project; rivers, flood plains, other bodies of water; Native American lands; military reservations; designated Federal, State, and local parks and natural area; and nonattainment and maintenance areas defined under the Clean Air Act, as amended (Title 42 U.S.C. 7401, et seq.). Orient true north at the top of the map.

To the extent that the information relates to potential environmental consequences of particular GNEP facilities, the information must be developed in sufficient detail to support the analysis. The information identified below must be represented on the maps identified above; separate maps or tables may be used if they better support the analysis.

## 2. Aquatic and riparian ecological communities.

- a. Describe the fish and shellfish community in the source water body. List species and estimates of the numbers of fish and shellfish that is present in the portion of the water body that could be affected by consumptive water use. The distribution and value of commercial and sport fisheries shall be discussed. The locations of important habitats for fish and shell fish (e.g., spawning areas, nursery grounds, feeding areas, wintering area, and migration routes) within the area that could be affected by consumptive water use shall be fully described.
- b. Describe the riparian ecological community in the source water body. For the portion of the water body that could be affected by consumptive water use, describe the associated riparian ecological community types, including (a) their extent and locations, (b) lists of plants and animal species they contain, and (c) estimates of the abundance of those species.

## 3. Water resources that may be subject to use conflicts or quality degradation. The following information shall be provided to enable assessment of the magnitude and significance of potential groundwater use conflicts during operation.

- a. Describe all groundwater aquifers potentially impacted by operation of on-site wells, including approximate areal extent, thickness, porosities, and hydraulic conductivities of aquifer strata. The descriptions shall discuss significant uncertainties and inhomogeneities.

b. Describe existing and known future off-site and on-site wells, including average flowrate, peak flowrate, water use, and completion depth.

c. Provide maps of steady-state piezometric surfaces estimated with on-site and off-site wells at peak pumpage, average pumpage, and no pumpage. These maps shall indicate the location of all wells and shall annotate each off-site well with the drawdown of the piezometric surface attributable to the on-site wells and with the drawdown of the piezometric surface attributable to the off-site wells. Describe the methods of analysis, including assumptions used.

d. Describe the existing and known future groundwater rights (including Native American tribal groundwater rights).

e. Describe any wetlands in the vicinity that might be impacted by a lowered water table.

f. Water Quality: Describe potentially affected waters to which discharges from the proposed facilities could be made and describe their classification.

g. Describe any existing environmental contamination with impacts or potential to impact the groundwater quality for the proposed site.

h. If surface water is being proposed the applicant must state and provide proof of an unencumbered right to withdraw water.

i. Describe any existing environmental contamination with impacts or potential to impact the surface water quality for the proposed site.

j. Indicate the volume of surface water and ground water available and provide distance from the water source to the proposed site.

4. Critical and important terrestrial (plant and animal) habitats that may be disturbed by the proposed facilities. Critical habitats are described in 40 CFR 17.95 (fish and wildlife) and 17.96 (plants).

a. If the GNEP facilities could potentially disturb any plant or wildlife habitat, determine whether any of the plant and animal species is important and describe those plant and animal species or wildlife habitat. Important species are those that either (1) have high public interest or economic value or both or (2) may be critical to the structure and function of the ecosystem or provide a broader ecological perspective of an area. Important habitats are defined as those that support important species.

5. Threatened or endangered and special concern species identified on the site or within 10 km of the site. These species include those:

a. Listed at 50 CFR 17.11 (fish and wildlife) or 50 CFR 17.12 (plants).

b. Listed as a threatened or endangered, or other species of concern by the host State.

c. Proposed for listing, or are current candidates for listing in the Federal Register.

d. Describe threatened or endangered species, or candidate species, and critical habitat that may be found on the site or in the vicinity of the site. This information shall support the determination of whether the facility is likely to adversely affect such species or habitat.

6. Regional demography, based on the most current (updated) U.S. Census data: population by city, town, and county for those jurisdictions lying fully or partially within 80 km (50 mi) of the proposed site. Provide by census

tract/block the composition of minority persons and households below the poverty line within 80 km (50 mi) of the proposed site. Migrant workers as well as full-time residents shall be included. Provide these data by census tract/block for those geographic areas where the potential has been identified for adverse environmental impacts from the GNEP facilities. The most recent Bureau of the Census demographic information shall be supplemented with demographic information from State and local planning agencies. The following information shall be provided in textual, graphical, and/or on maps as necessary to provide adequate data for adequate environmental and/or safety analysis.

- a. Information related to the area's economic base, including construction industry and construction labor force, total regional labor force, unemployment levels, and future economic outlook.
- b. Housing information, including the sales and rental markets in the region, number and types of units, turnover and vacancy rate, and trends in additions.
- c. Information about the local educational system (regional primary and secondary schools and higher institutions), including present and projected capacity and percentage of utilization.
- d. Public and private recreational facilities and opportunities, including present and projected capacity and percentage of utilization.
- e. Regional tax structure and distribution of the present revenues to each jurisdiction and district.
- f. Local plans concerning land use and zoning that are relevant to population growth, housing, and changes in land use patterns.
- g. Social services and public facilities present and projected.
- h. Define the present population density, including weighted transient population, averaged over any radial distance up to 32 km (20 miles) and up to 80 km (50 miles) of the proposed site (cumulative population at a distance divided by the area at that distance).
- i. Distance from proposed site to nearest population centers: 1) at least 20,000 people; 2) at least 50,000; and 3) at least 100,000.

7. Historical, archaeological, and cultural resources: Identify any onsite or offsite historical, archaeological, and cultural properties that could be affected by the proposed facilities. On a copy of the site map prepared above, identify areas of potential effects if historical, archaeological, or cultural properties were found. All on-site historical, archaeological, and cultural properties and any off-site historic, archaeological, and cultural properties located in or near the facilities shall be identified and described in the text.

8. Future Projects: Describe and identify any known and reasonably foreseeable Federal and non-Federal projects and other actions in the vicinity of the site that may contribute to the cumulative environmental impacts of the proposed GNEP facilities.

Information relating to the site safety considerations of the GNEP facilities shall be developed in sufficient depth in textual, tabular, and graphical form to support a detailed safety analysis. The information identified below shall be represented on the maps identified above; or separate maps or tables may be used if they better support the analysis.

9. Geology/Seismology: Describe proposed site locations, including geologic and seismic characteristics, surface faulting, ground motion (including peak ground acceleration and a chance of exceeding this peak), and foundation conditions. Describe the seismic zone and capable faults, as defined in 10 CFR 100, within 200 miles of proposed site location.

10. Weather/Climatology: Describe the site weather and climatological conditions, including:

- a. Temperatures: average, monthly and annual, extremes.
- b. Precipitation: average annual and monthly as well as maximum and minimum recorded annual and monthly.
- c. Wind speeds: average annual, highest annual.
- d. Hurricane: annual probability, maximum wind speed, tangential velocity, translational velocity, external pressure drop, and site designation, if any, by the U.S. Land Falling Hurricane Probability Project.
- e. Tornado: annual probability, maximum wind speed, tangential velocity, translational velocity, external pressure drop, and the number and intensity of tornados classified as F2 or higher that have occurred within 1,000 square miles of the proposed site over the last 5 years.
- f. Identify positions of air quality nonattainment and maintenance areas for the National Ambient Air Quality Standards (NAAQS) relative to the proposed site and probable areas where workers will reside. Note the likely commuter routes for the workers. If there are no nonattainment and maintenance areas within 80 km (50 mi) of the proposed site and residential locations of workers, this shall be explained and no further analysis is required.
  - (i) Identify the pollutant or pollutants for which the area is in nonattainment or maintenance, as well as the severity of nonattainment.
  - (ii) Determine the meteorological conditions typically associated with poor air quality with regional climatology.

11. Hydrology/flooding: Describe the maximum probable flood, the flood source(s), and any current or planned activities that could reasonably be expected to affect the maximum probable flood.

12. Regulatory and Permitting: Identify local, regional, state and national regulatory and environmental permits required for this facility, including legislative or regulatory prohibitions that might prevent siting such a facility.

13. Construction Costs: Relative cost of heavy construction projects in the area, as compared to the RSMeans U.S. 30-city average.

14. Storage Capability: Identify the sites storage capability for the volume of nuclear materials associated with commercial scale operations.

15. Other Facilities. Potential hazardous facilities and activities within 5 miles of a proposed site, and major airports within 10 miles of a proposed site should be identified.

16. In addition to the above, indicate whether or not the proposed site, or any portion thereof, is on the National Priorities List or is included in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) database. The CERCLIS can be found at [http://www.epa.gov/enviro/html/cerclis/cerclis\\_query.html](http://www.epa.gov/enviro/html/cerclis/cerclis_query.html). The National Priorities List can be found at <http://www.epa.gov/superfund/sites/npl/npl.htm>.

For the informal community-involvement activities, the awardee must make it clear that (1) the purpose of this involvement is to solicit opinions regarding the Global Nuclear Energy Partnership (GNEP) siting studies; (2) the opinions will be provided to DOE as part of the siting study; and (3) other legal processes may be available where

input may be given directly to DOE.

Information obtained from the community involvement activities are to be provided in a report that summarizes the state and local stakeholder concerns, issues, and values. These summary(s) are due to DOE ten (10) working days after a meeting is held.

**Invoices**

The copies of the invoices sent to the DOE administrator, NFAA, Block 12, should include copies of the subcontractor invoices, time and attendance work sheets and travel vouchers for direct charge Eddy Lea Energy Alliance personnel, and copies of receipts, etc. for all other expenditures. The subcontractor invoices do not need to have detail support attached unless specifically requested by the U.S. Department of Energy, Contracting Officer.

**No Cost Time Extension**

10CFR 600.26 (d) will not apply to this award. Project period extensions will not be considered due to the criticality of the period of performance.

**Foreign Travel**

Foreign travel is not authorized under this award.

**Intellectual Property Provisions (NRD-1003)**

Nonprofit organizations are subject to the intellectual property requirements at 10 CFR 600.136(a), (c) and (d). All other organizations are subject to the intellectual property requirements at 10 CFR 600.136(a) and (c).

*(End of Continuation Sheet)*

**U.S. Department of Energy**  
**Federal Assistance Budget Information**

1. Award Number DE-FG07-07ID14799	2. Awardee Name and Address  Eddy Lea Energy Alliance  320 North Turner Hobbs, NM 88240-8302					
3. Amendment No. A000						
4. Project Title  Eddy Lea Siting Study for the GNEP CFTC and ABR Facilities	5. Project Period 1/30/2007 - 5/1/2007					
	6. Program Title  81.121 NUCLEAR ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION					
<b>SECTION A - BUDGET SUMMARY</b>						
Budget Period	Start Date	End Date	Federal	Non-Federal	Total Approved Budget	Total Obligated Federal Funds
1	1/30/2007	5/1/2007	\$1,590,016.00	\$0.00	\$1,590,016.00	\$1,590,016.00
<b>TOTALS</b>			\$1,590,016.00	\$0.00	\$1,590,016.00	\$1,590,016.00
<b>SECTION B - BUDGET CATEGORIES</b>						
7. Object Class Categories	Period 1	Period 2	Period 3	Period 4	Period 5	Total
a. Personnel	\$166,875.00					\$166,875.00
b. Fringe Benefits	\$0.00					\$0.00
c. Travel	\$6,481.00					\$6,481.00
d. Equipment	\$0.00					\$0.00
e. NM Gross Receipts Tax	\$96,911.00					\$96,911.00
f. Supplies	\$500.00					\$500.00
g. Pre-Award Siting	\$130,000.00					\$130,000.00
h. Washington Group Int	\$455,128.00					\$455,128.00
i. AREVA	\$457,521.00					\$457,521.00
j. Public Involvement	\$99,000.00					\$99,000.00
k. Other Contracts	\$127,600.00					\$127,600.00
l. Other Office Expenses	\$50,000.00					\$50,000.00
<b>TOTALS</b>	\$1,590,016.00					\$1,590,016.00

Note 1: All estimated future budget allocations are subject to availability of funds.

Note 2: If more than five budget periods exist, the budget details for Period 6 and beyond will be included in a separate attachment.



# U.S. Department of Energy

## FEDERAL ASSISTANCE REPORTING CHECKLIST

### AND INSTRUCTIONS

1. Identification Number: DE-FG07-07ID14799		2. Program/Project Title: 81.121 NUCLEAR ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION Eddy Lea Siting Study for the GNEP CFTC and ABR Facilities											
3. Recipient: Eddy Lea Energy Alliance  320 North Turner Hobbs, NM 88240-8302													
4. Reporting Requirements:	Frequency	No. of Copies	Addresses										
A. MANAGEMENT REPORTING  <input type="checkbox"/> Progress Report <input type="checkbox"/> Special Status Report													
B. SCIENTIFIC/TECHNICAL REPORTING  Reports/Products must be submitted with appropriate DOE F 241. The 241 forms are available at <a href="http://www.osti.gov/eliink">www.osti.gov/eliink</a> .  <table style="width: 100%; border: none;"> <tr> <td style="width: 60%; text-align: left;">Report/Product</td> <td style="width: 40%; text-align: left;">Form</td> </tr> <tr> <td><input type="checkbox"/> Final Scientific/Technical Report</td> <td>DOE F 241.3</td> </tr> <tr> <td><input type="checkbox"/> Conference papers/proceedings*</td> <td>DOE F 241.3</td> </tr> <tr> <td><input type="checkbox"/> Software/Manual</td> <td>DOE F 241.3</td> </tr> <tr> <td><input type="checkbox"/> Other (see special instructions)</td> <td>DOE F 241.3</td> </tr> </table> * Scientific and technical conferences only	Report/Product	Form	<input type="checkbox"/> Final Scientific/Technical Report	DOE F 241.3	<input type="checkbox"/> Conference papers/proceedings*	DOE F 241.3	<input type="checkbox"/> Software/Manual	DOE F 241.3	<input type="checkbox"/> Other (see special instructions)	DOE F 241.3			A, B applies to any specified OSTI reports <a href="http://www.osti.gov/eliink-2413">http://www.osti.gov/eliink-2413</a> <a href="http://www.osti.gov/eliink-2413">http://www.osti.gov/eliink-2413</a> <a href="http://www.osti.gov/estsc/241-4pre.jsp">http://www.osti.gov/estsc/241-4pre.jsp</a>
Report/Product	Form												
<input type="checkbox"/> Final Scientific/Technical Report	DOE F 241.3												
<input type="checkbox"/> Conference papers/proceedings*	DOE F 241.3												
<input type="checkbox"/> Software/Manual	DOE F 241.3												
<input type="checkbox"/> Other (see special instructions)	DOE F 241.3												
C. FINANCIAL REPORTING  <input type="checkbox"/> SF-269, Financial Status Report <input checked="" type="checkbox"/> SF-269A, Financial Status Report (Short Form) <input type="checkbox"/> SF-272, Federal Cash Transactions Report	F	via Email	A B										
D. CLOSEOUT REPORTING  <input checked="" type="checkbox"/> Patent Certification <input checked="" type="checkbox"/> Property Certification <input type="checkbox"/> Other	F F	via Email via Email	A A										
E. OTHER REPORTING  <input type="checkbox"/> Annual Indirect Cost Proposal <input type="checkbox"/> Annual Inventory of Federally Owned Property, if any <input checked="" type="checkbox"/> Other	A	via Email											
<b>FREQUENCY CODES AND DUE DATES:</b> A - Within 5 calendar days after events or as specified F - Final; 90 calendar days after expiration or termination of the award. Y - Yearly; 90 days after the end of the reporting period. S - Semiannually; within 30 days after end of reporting period. Q - Quarterly; within 30 days after end of the reporting period.													
5. Special Instructions:  See page 7													

**Federal Assistance Reporting Instructions (5/06)****A. MANAGEMENT REPORTING****Progress Report**

The Progress Report must provide a concise narrative assessment of the status of work and include the following information and any other information identified under Special Instructions on the Federal Assistance Reporting Checklist:

1. The DOE award number and name of the recipient.
2. The project title and name of the project director/principal investigator.
3. Date of report and period covered by the report.
4. A comparison of the actual accomplishments with the goals and objectives established for the period and reasons why the established goals were not met.
5. A discussion of what was accomplished under these goals during this reporting period, including major activities, significant results, major findings or conclusions, key outcomes or other achievements. This section should not contain any proprietary data or other information not subject to public release. If such information is important to reporting progress, do not include the information, but include a note in the report advising the reader to contact the Principal Investigator or the Project Director for further information.
6. Cost Status. Show approved budget by budget period and actual costs incurred. If cost sharing is required break out by DOE share, recipient share, and total costs.
7. Schedule Status. List milestones, anticipated completion dates and actual completion dates. If you submitted a project management plan with your application, you must use this plan to report schedule and budget variance. You may use your own project management system to provide this information.
8. Any changes in approach or aims and reasons for change. Remember significant changes to the objectives and scope require prior approval by the contracting officer.
9. Actual or anticipated problems or delays and actions taken or planned to resolve them.
10. Any absence or changes of key personnel or changes in consortium/teaming arrangement.
11.

A description of any product produced or technology transfer activities accomplished during this reporting period, such as:

  - A. Publications (list journal name, volume, issue); conference papers; or other public releases of results. Attach or send copies of public releases to the DOE Project Officer identified in Block 11 of the Notice of Financial Assistance Award.

B. Web site or other Internet sites that reflect the results of this project.

C. Networks or collaborations fostered.

D. Technologies/Techniques.

E. Inventions/Patent Applications

F. Other products, such as data or databases, physical collections, audio or video, software or netware, models, educational aid or curricula, instruments or equipment.

### **Special Status Report**

The recipient must report the following events by e-mail as soon as possible after they occur:

1. Developments that have a significant favorable impact on the project.
2. Problems, delays, or adverse conditions which materially impair the recipient's ability to meet the objectives of the award or which may require DOE to respond to questions relating to such events from the public. The recipient must report any of the following incidents and include the anticipated impact and remedial action to be taken to correct or resolve the problem/condition:
  - a. Any single fatality or injuries requiring hospitalization of five or more individuals.
  - b. Any significant environmental permit violation.
  - c. Any verbal or written Notice of Violation of any Environmental, Safety, and Health statutes.
  - d. Any incident which causes a significant process or hazard control system failure.
  - e. Any event which is anticipated to cause a significant schedule slippage or cost increase.
  - f. Any damage to Government-owned equipment in excess of \$50,000.
  - g. Any other incident that has the potential for high visibility in the media.

## **B. SCIENTIFIC/TECHNICAL REPORTS**

### **Final Scientific/Technical Report**

Content. The final scientific/technical report must include the following information and any other information identified under Special Instructions on the Federal Assistance Reporting Checklist:

1. Identify the DOE award number; name of recipient; project title; name of project director/principal investigator; and consortium/teaming members.

2. Display prominently on the cover of the report any authorized distribution limitation notices, such as patentable material or protected data. Reports delivered without such notices may be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use or reproduction of such reports.
3. Provide an executive summary, which includes a discussion of 1) how the research adds to the understanding of the area investigated; 2) the technical effectiveness and economic feasibility of the methods or techniques investigated or demonstrated; or 3) how the project is otherwise of benefit to the public. The discussion should be a minimum of one paragraph and written in terms understandable by an educated layman.
4. Provide a comparison of the actual accomplishments with the goals and objectives of the project.
5. Summarize project activities for the entire period of funding, including original hypotheses, approaches used, problems encountered and departure from planned methodology, and an assessment of their impact on the project results. Include, if applicable, facts, figures, analyses, and assumptions used during the life of the project to support the conclusions.
6. Identify products developed under the award and technology transfer activities, such as:
  - a. Publications (list journal name, volume, issue), conference papers, or other public releases of results. If not provided previously, attach or send copies of any public releases to the DOE Project Officer identified in Block 11 of the Notice of Financial Assistance Award;
  - b. Web site or other Internet sites that reflect the results of this project;
  - c. Networks or collaborations fostered;
  - d. Technologies/Techniques;
  - e. Inventions/Patent Applications, licensing agreements; and
  - f. Other products, such as data or databases, physical collections, audio or video, software or netware, models, educational aid or curricula, instruments or equipment.
7. For projects involving computer modeling, provide the following information with the final report:
  - a. Model description, key assumptions, version, source and intended use;
  - b. Performance criteria for the model related to the intended use;
  - c. Test results to demonstrate the model performance criteria were met (e.g., code verification/validation, sensitivity analyses, history matching with lab or field data, as appropriate);
  - d. Theory behind the model, expressed in non-mathematical terms;
  - e. Mathematics to be used, including formulas and calculation methods;

- f. Whether or not the theory and mathematical algorithms were peer reviewed, and, if so, include a summary of theoretical strengths and weaknesses;
- g. Hardware requirements; and
- h. Documentation (e.g., users guide, model code).

Electronic Submission. The final scientific/technical report must be submitted electronically via the DOE Energy Link System (E-Link) accessed at <http://www.osti.gov/elink-2413>.

Electronic Format. Reports must be submitted in the ADOBE PORTABLE DOCUMENT FORMAT (PDF) and be one integrated PDF file that contains all text, tables, diagrams, photographs, schematic, graphs, and charts. Materials, such as prints, videos, and books, that are essential to the report but cannot be submitted electronically, should be sent to the Contracting Officer at the address listed in Block 12 of the Notice of Financial Assistance Award.

Submittal Form. The report must be accompanied by a completed electronic version of DOE Form 241.3, "U.S. Department of Energy (DOE), Announcement of Scientific and Technical Information (STI)." You can complete, upload, and submit the DOE F.241.3 online via E-Link. You are encouraged not to submit patentable material or protected data in these reports, but if there is such material or data in the report, you must: (1) clearly identify patentable or protected data on each page of the report; (2) identify such material on the cover of the report; and (3) mark the appropriate block in Section K of the DOE F 241.3. Reports must not contain any limited rights data (proprietary data), classified information, information subject to export control classification, or other information not subject to release. Protected data is specific technical data, first produced in the performance of the award that is protected from public release for a period of time by the terms of the award agreement.

### **Conference Papers/Proceedings**

Content: The recipient must submit a copy of any conference papers/proceedings, with the following information: (1) Name of conference; (2) Location of conference; (3) Date of conference; and (4) Conference sponsor.

Electronic Submission. Scientific/technical conference paper/proceedings must be submitted electronically via the DOE Energy Link System (E-Link) at <http://www.osti.gov/elink-2413>. Non-scientific/technical conference papers/proceedings must be sent to the URL listed on the Reporting Checklist.

Electronic Format. Conference papers/proceedings must be submitted in the ADOBE PORTABLE DOCUMENT FORMAT (PDF) and be one integrated PDF file that contains all text, tables, diagrams, photographs, schematic, graphs, and charts. If the proceedings cannot be submitted electronically, they should be sent to the DOE Administrator at the address listed in Block 12 of the Notice of Financial Assistance Award.

Submittal Form. Scientific/technical conference papers/proceedings must be accompanied by a completed DOE Form 241.3. The form and instructions are available on E-Link at <http://www.osti.gov/elink-2413>. This form is not required for non-scientific or non-technical conference papers or proceedings.

### **Software/Manual**

Content. Unless otherwise specified in the award, the following must be delivered: source code, the executable object code and the minimum support documentation needed by a competent user to understand and use the software and to be able to modify the software in subsequent development efforts.

Electronic Submission. Submissions may be submitted electronically via the DOE Energy Link System (E-Link) at <http://www.osti.gov/estsc/241-4pre.jsp>. They may also be submitted via regular mail to:

Energy Science and Technology Software Center  
P.O. Box 1020  
Oak Ridge, TN 37831

Submittal Form. Each software deliverable and its manual must be accompanied by a completed DOE Form 241.4 “Announcement of U.S. Department of Energy Computer Software.” The form and instructions are available on E-Link at <http://www.osti.gov/estsc/241-4pre.jsp>.

## C. FINANCIAL REPORTING

Recipients must complete the financial reports identified on the Reporting Checklist in accordance with the report instructions. These standard forms are available at <http://www.whitehouse.gov/omb/grants/index.html>. Fillable forms are available at <http://grants.pr.doe.gov>.

## D. CLOSEOUT REPORTS

### Final Invention and Patent Report

The recipient must provide a DOE Form 2050.11, “PATENT CERTIFICATION.” This form is available at <http://www.directives.doe.gov/pdfs/forms/2050-11.pdf> and <http://grants.pr.doe.gov>.

### Property Certification

The recipient must provide the Property Certification, including the required inventories of non-exempt property, located at <http://grants.pr.doe.gov>.

## E. OTHER REPORTING

### Annual Indirect Cost Proposal and Reconciliation

Requirement. In accordance with the applicable cost principles, the recipient must submit an annual indirect cost proposal, reconciled to its financial statements, within six months after the close of the fiscal year, unless the award is based on a predetermined or fixed indirect rate(s), or a fixed amount for indirect or facilities and administration (F&A) costs.

Cognizant Agency. The recipient must submit its annual indirect cost proposal directly to the cognizant agency for negotiating and approving indirect costs. If the DOE awarding office is the cognizant agency, submit the annual indirect cost proposal to the DOE Award Administrator identified in Block 12 of the Notice of Financial Assistance Award.

### Annual Inventory of Federally Owned Property

**Requirement.** If at any time during the award the recipient is provided Government-furnished property or acquires property with project funds and the award specifies that the property vests in the Federal Government (i.e. federally owned property), the recipient must submit an annual inventory of this property to the DOE Award Administrator identified in Block 12 of the Notice of Financial Assistance Award no later than October 30th of each calendar year, to cover an annual reporting period ending on the preceding September 30th.

**Content of Inventory.** The inventory must include a description of the property, tag number, acquisition date, location of property, and acquisition cost, if purchased with project funds. The report must list all federally owned property, including property located at subcontractor's facilities or other locations.

## F. SPECIAL INSTRUCTIONS

Your performance in providing on-time report deliverables will be monitored by Procurement Services Division (PSD), Idaho Operations Office, Department of Energy. Reports not received by the specified due date are late. Overdue, inaccurate, or non-conforming reports are not acceptable. PSD will withhold payments or take other administrative actions as needed for non-compliance with reporting requirements (see 10 CFR 600.24). Only the Contracting Officer may waive or excuse required reports.

In order for accurate logging and processing of reports, it is critical that reports be sent to all the specified addressees and in the manner requested. PSD receives a copy of all reports via [psdrept@id.doe.gov](mailto:psdrept@id.doe.gov). The message subject line must include the award number.

Message Subject Line Example: DE-FC07-02ID99999, 4Q SF 269A Report.

The official award number must also be identified on all reports. A project number, if assigned by the program manager, may also be included, but is not a substitute for the official award number.

Report forms and additional report submittal guidance may be found on PSD's Internet web site at <http://www.id.doe.gov/doeid/psd/proc-div.html>. General guidance, in a question and answer format, is listed under "FA Report Submittal Guidance."

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### ADDITIONAL REPORTS

Report Name	Description	DueDate
Mid-term Progress Report	At the mid-point of the project period, in coordination with the Program Manager, a Progress Report will be presented in Washington, D.C.	03/15/2007
Summary of Community Involvement Activities	As described in the Statement of Objectives. Send to report addresses A and B.	05/01/2007
Detailed Site Report	As described in the Statement of Objectives. Send to report addresses A and B.	05/01/2007

### REPORT ADDRESSEES

- A. Procurement Services Division (PSD): [psdrept@id.doe.gov](mailto:psdrept@id.doe.gov)
- B. DOE Project Manager: Deborah A. Swichkow [deborah.swichkow@nuclear.energy.gov](mailto:deborah.swichkow@nuclear.energy.gov)
- C. DOE Headquarters' Program Manager:  
cc: Headquarters' Technical Monitor:

(End of Part IV)



## **Special Terms and Conditions Grants and Cooperative Agreements**

### **RESOLUTION OF CONFLICTING CONDITIONS**

Any apparent inconsistency between Federal statutes and regulations and the terms and conditions contained in this award must be referred to the DOE Award Administrator identified in Block 12 of the Notice of Financial Assistance Award for guidance.

### **PAYMENT PROCEDURES – REIMBURSEMENT THROUGH THE AUTOMATED CLEARING HOUSE (ACH) VENDER INQUIRY PAYMENT ELECTRONIC REPORTING SYSTEM (VIPERS)**

- a. Method of Payment. Payment will be made by reimbursement through ACH.
- b. Requesting Reimbursement. Requests for reimbursements must be made electronically through Department of Energy's Oak Ridge Financial Service Center (ORFSC) VIPERS. To access and use VIPERS, you must enroll at <https://finweb.oro.doe.gov/vipers.htm>. Detailed instructions on how to enroll are provided on the web site. For non-construction awards, you must submit a Standard Form (SF) 270, "Request for Advance or Reimbursement" at <https://finweb.oro.doe.gov/vipers.htm> and attach a file containing appropriate supporting documentation. The file attachment must show the total federal share claimed on the SF 270, the non-federal share claimed for the billing period if cost sharing is required, and cumulative expenditures to date (both Federal and non-Federal) for each of the following categories: salaries/wages and fringe benefits; equipment; travel; participant/training support costs, if any; other direct costs, including subawards/contracts; and indirect costs. For construction awards, you must submit a SF 271, "Outlay Report and Request for Reimbursement for Construction Programs," through VIPERS.
- c. Timing of submittals. Submittal of the SF 270 or SF 271 should coincide with your normal billing pattern, but not more frequently than every two weeks. Requests for reimbursement must be limited to the amount of disbursements made during the billing period for the federal share of direct project costs and the proportionate share of any allowable indirect costs incurred during that billing period.
- d. Adjusting payment requests for available cash. You must disburse any funds that are available from repayments to and interest earned on a revolving fund, program income, rebates, refunds, contract settlements, audit recoveries, credits, discounts, and interest earned on any of those funds before requesting additional cash payments from DOE/NNSA.
- e. Payments. The DOE approving official will approve the invoice as soon as practicable but not later than 30 days after your request is received, unless the billing is improper. Upon receipt of an invoice payment authorization from the DOE approving official, the ORFSC will disburse payment to you. You may check the status of your payments at the VIPER web site. All payments are made by electronic funds transfer to the bank account identified on the ACH Vendor/Miscellaneous Payment Enrollment Form (SF 3881) that you filed.

### **REBUDGETING AND RECOVERY OF INDIRECT COSTS**

- a. If actual allowable indirect costs are less than those budgeted and funded under the award, you may use the difference to pay additional allowable direct costs during the project period. If at the completion of the award the Government's share of total allowable costs (i.e., direct and indirect), is less than the total costs reimbursed, you must refund the difference.

b. Recipients are expected to manage their indirect costs. DOE will not amend an award solely to provide additional funds for changes in indirect cost rates (See “Incremental Funding and Maximum Obligation article). DOE recognizes that the inability to obtain full reimbursement for indirect costs means the recipient must absorb the underrecovery. Such underrecovery may be allocated as part of the organization’s required cost sharing.

## **PRE-AWARD COSTS**

You are entitled to reimbursement for costs incurred on or after December 12, 2006, as authorized by the pre-award costs letter dated December 11, 2006, if such costs are allowable in accordance with the applicable Federal cost principles referenced in 10 CFR part 600.

## **USE OF PROGRAM INCOME**

If you earn program income during the project period as a result of this award, you must deduct the program income from the total allowable project costs to determine the net allowable costs on which the Federal share is based.

## **STATEMENT OF FEDERAL STEWARDSHIP**

DOE/NNSA will exercise normal Federal stewardship in overseeing the project activities performed under this award. Stewardship activities include, but are not limited to, conducting site visits; reviewing performance and financial reports; providing technical assistance and/or temporary intervention in unusual circumstances to correct deficiencies which develop during the project; assuring compliance with terms and conditions; and reviewing technical performance after project completion to insure that the award objectives have been accomplished.

## **SITE VISITS**

DOE/NNSA’s authorized representatives have the right to make site visits at reasonable times to review project accomplishments and management control systems and to provide technical assistance, if required. You must provide, and must require your subawardees to provide, reasonable access to facilities, office space, resources, and assistance for the safety and convenience of the government representatives in the performance of their duties. All site visits and evaluations must be performed in a manner that does not unduly interfere with or delay the work.

## **REPORTING REQUIREMENTS**

a. Requirements. The reporting requirements for this award are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to this award. Failure to comply with these reporting requirements is considered a material noncompliance with the terms of the award. Noncompliance may result in withholding of future payments, suspension or termination of the current award, and withholding of future awards. A willful failure to perform, a history of failure to perform, or unsatisfactory performance of this and/or other financial assistance awards, may also result in a debarment action to preclude future awards by Federal agencies.

b. Dissemination of scientific/technical reports. Scientific/technical reports submitted under this award will be disseminated on the Internet via the DOE Information Bridge ([www.osti.gov/bridge](http://www.osti.gov/bridge)), unless the report contains patentable material, protected data or SBIR/STTR data. In addition, these reports must not contain any limited rights data (proprietary data), classified information, information subject to export control classification, or other information not subject to release. Citations for journal articles produced under the award will appear on the DOE Energy Citations Database ([www.osti.gov/energycitations](http://www.osti.gov/energycitations)).

## **PUBLICATIONS (OCT 2004)**

a. You are encouraged to publish or otherwise make publicly available the results of the work conducted under the award.

b. An acknowledgment of Federal support and a disclaimer must appear in the publication of any material, whether copyrighted or not, based on or developed under this project, as follows:

Acknowledgment: “This material is based upon work supported by the Department of Energy [National Nuclear Security Administration] [add name(s) of other agencies, if applicable] under Award Number(s) [enter the award number(s)].”

Disclaimer: “This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.”

## **FEDERAL, STATE, AND MUNICIPAL REQUIREMENTS**

You must obtain any required permits and comply with applicable federal, state, and municipal laws, codes, and regulations for work performed under this award.

## **INTELLECTUAL PROPERTY PROVISIONS AND CONTACT INFORMATION**

a. The intellectual property provisions applicable to this award are provided as an attachment to this award or are referenced in Block 19 of the Notice of Financial Assistance Award.

b. Questions regarding intellectual property matters should be referred to the Patent Counsel designated as the service provider for the DOE office that issued the award. The IP Service Providers List is found at <http://www.gc.doe.gov/gcmain.html>. Click on Intellectual Property and Laboratory Partnering, and then click on IP Service Providers List.

## **LOBBYING RESTRICTIONS**

By accepting funds under this award, you agree that none of the funds obligated on the award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

## **NOTICE REGARDING THE PURCHASE OF AMERICAN-MADE EQUIPMENT AND PRODUCTS -- SENSE OF CONGRESS**

It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available under this award should be American-made.